

Kevin Doyle
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Highly motivated, accomplished person with successful record of simultaneously performing multiple research projects and able to write publication-quality papers. Keeps organized records of work and can lead teams to troubleshoot errors. Strong, dynamic communicator able to analyze and illustrate complicated concepts. Proficient in wet and dry laboratory skills.

Qualifications:

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|------------------------|-------------------------|------------------------------------|
| • Unix Systems | • Algorithm Design | • Scientific Writing/Communication |
| • R | • Growing Cell Cultures | • Pipeline Improvement |
| • Python | • Pipetting | • Genomic Data Analysis |
| • Statistical Analysis | • Coulter Counter | • Trace Metal Clean Environments |
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Experience:

Hollister Lab, Lab Technician 2015 - Present

Stony Brook University, Stony Brook, NY 11790

Project: Evolution of allopolyploidy in *Arabidopsis thaliana*

Utilized Genome Analysis Toolkit (GATK) best practices pipeline to acquire, organize, and analyze genomic data from the National Center for Biotechnology Information (NCBI) Sequence Read Archive (SRA) database. Analyzed haplotype variance to infer global patterns of genomic divergence. Tools used were SRA Toolkit, SamTools, Picard Tools, Stampy, GATK, UnifiedGenotyper, HaplotypeCaller, VCFtools, SnpEff.

- Created scripts to enhance existing pipelines to streamline analyses
- Maintained data and documentation organized on unix server
- Utilized GATK, Biopython, & R to analyze variation among individuals
- Assisted in setting up lab equipment

Baines Lab of Aquatic Ecology, Research Assistant 2013 - Present

Stony Brook University, Stony Brook, NY 11790

Project: Fe Limitation in the Copepod *Acartia tonsa*

Designed an experiment to determine the critical Fe:C threshold where iron limitation occurs in *Acartia tonsa* and performed statistical analyses to find where threshold occurred. Scrupulously clean conditions had to be maintained regarding all reagents and surfaces to prevent trace metal contamination.

- Maintained organized records of calculations and analyses
- Analyzed data and produced figures with R and Excel
- Grew cell and zooplankton cultures
- Created various chemical reagents to use in experiment
- Wrote paper for publication (expected publication date: 2016)

Education:

MA Biology - Applied Evolution

2015

Stony Brook University, Stony Brook, NY 11790

Relevant coursework: Biometry, Computational Biology, Population Genetics

GPA: 3.8

BS Biology

2013

Stony Brook University, Stony Brook, NY 11790

Minor: Ecosystems and Human Impact

Dean's List

Golden Key Honor Society

Teaching:

BIO 341: Plant Diversity — T.A.

2015

Stony Brook University, Stony Brook, NY 11790

Description: An introduction to the study of plants, especially green plants, including the origin and evolution of land plants. Topics include cellular structure and function, photosynthesis and respiration, gross anatomy, taxonomy and the diversity of organisms, plant ecology, agriculture.

SBC 201: Systems and Models — T.A.

2012

Stony Brook University, Stony Brook, NY 11790

Description: Introduction to the dynamic modeling of complex systems using simulation software that facilitates the visualization, formulation, and analysis of systems. Systems studied include ecological, economic, chemical, population, and epidemiological models.

Future Publications:

Doyle, K.W and Baines, S.B. 2016. A Study of Iron Limitation in the Copepod *Acartia tonsa*. (In Progress)

Other Proficiencies:

- MS Office
- OS X, Linux, Windows
- Pages, Numbers, Keynote (Mac)
- Compiling binary files
- Software installation
- Debugging